

Examiner Telephone Interview

This letter follows two telephone exchanges between the examiner and the undersigned attorney. On Friday, August 14, 2008 the undersigned agent phoned the examiner and requested arrangements for having a telephone interview in the following week. For the purposes of that interview only, the applicant forwarded to the examiner by fax on Monday, August 17 a paper containing possible amendments to the claims.

Those possible amendments and the general nature of the principal Desjoyaux reference were discussed in a telephone interview held on Thursday, August 20. In that interview the applicant suggested that Desjoyaux reference does not depict a form present along the base of the wall panel that is interconnected with the interior flange volume of the vertical flange forms. The examiner observed that the flange shown at the bottom of the wall panel in Figures 1 and 2 qualified as a footing form that extends between the vertical flange forms of the Desjoyaux reference, and therefore met the language of Claim 1.

The applicant's attorney explained his interpretation of Figures 6 and 7 of the Desjoyaux reference as showing a precast-wall having on the outer, pool side of the wall a precast extension which the examiner has characterized as a "footing portion". The applicant's attorney observed that while this extension may have been precast to serve as a "footing portion" it did not constitute a footing form intended to be filled with binder at the final site where the wall was to be erected.

Claim 1 is clear: the invention addresses a preformed wall panel having: "a footing form fitted along the wall portion proximate to but displaced horizontally from the base end of the wall panel". The feature identified by the examiner in Figures 6 and 7 of Desjoyaux is not a "form". Rather it corresponds and is analogous to the extension identified as 18 in Figure 6 of the applicant's own application. This is a pre-formed extension from the base of the precast wall which does not form part of the applicant's present invention.

The telephone interview ended on the basis that the applicant would make a formal written submission in response to the interview.

Amendment to Claim 1

Claim 1 has been amended as formally presented in Schedule A to read as follows:

1. (Currently amended) A preformed wall panel having base and top ends and two vertical side edges for installation on a supporting surface, comprising:
 - a) a wall portion having a width and height fitted with a vertical flange form with an interior flange volume for creating a flange on the wall portion when filled with binder material; and

b) a footing form fitted along the wall portion proximate to but displaced horizontally from the base end of the wall panel to provide a downwardly open but upwardly closed footing volume that will, when filled with binder material, confine such binder between the footing form and said supporting surface when installed thereon,

wherein said vertical flange form and footing form define interconnected volumes and wherein said forms serve to contain binder material poured into the footing form through the vertical flange form to provide said wall portion with both a flange and a footing, and

wherein the footing form of the panel extends along the base end of the panel for the width of the panel to provide a continuous footing volume whereby the footing form can be filled with a continuous volume of binder material that serves as the footing along the base end of the panel.

The object of this amendment is to emphasize the meaning of "form" as used in the expression "a footing form". The amendments reiterate the description of "footing form" as already set-forth in the written disclosure, e.g.

(from page 5, line 24+ of the PCT application as published, as part of the second paragraph under the title "Summary of the Invention"):

"The footing form is like the upper trough form, except that it is inverted i.e., it provides a downwardly-directed, open, volume that is capped on its upper side by the steel of the footing form. The footing form volume interconnects with the inner volume of the hollow vertical forms."

(from page 8, lines 3 to 13 of the PCT application as published):

"Because the footing form is downwardly open, the poured concrete footing will be in intimate contact with and will conform to the base of compacted gravel. The concrete or binder within the footing and flanges is integrally connected, and the concrete or binder running along the base of the footing form is substantially continuous between panels, potentially endlessly.

"Thus, the invention according to one aspect relies upon the presence of hollow forms coupled to a pre-formed wall panel for subsequent filling with a binder material such as concrete to produce both a vertical flange on the panel, once the open hollow interior of the form is filled with the binder material, and a footing...."

Other excerpts from the applicant's written disclosure could be cited, but it is clear from the overall description that the applicant is describing a "form" which will contain a "footing form volume" which will then, when filled with a binder such as concrete, provide a "footing" at the base of the precast concrete wall.

The flange along the base of the preformed wall shown in Figures 1 and 2 of Desjoyaux and cited by the examiner in the telephone interview as an example of a "footing form" does not qualify as a "footing form". At most, it would serve as a rail along one side of the base of the pre-formed wall to prevent flooding of concrete past the flange and base of the pre-formed wall. But it would not serve as a form to confine the concrete passing down the vertical passageways to spread-out on the earth supporting the wall structure.

Even without the amendment presently proposed, the language in Claim 1, namely: "a footing form fitted along the wall portion proximate to but displaced horizontally from the base end of the wall panel to provide a downwardly open footing" is not met by the flange identified by the examiner. Nevertheless the additional words: "but upwardly closed" presently being added to Claim 1 clearly distinguish this claim over this prior art reference and are being added out of an abundance of caution to reassure the examiner.

In summary, it is believed that the language of Claim 1 even before the present amendment but certainly with the present amendment distinguishes a truly valuable advance over the Desjoyaux reference. Desjoyaux does not teach the presence of a footing form extending laterally from the bottom end of a precast wall that will allow a footing to be poured on site by filling in the upper trough and vertical conduits. The present invention works because the vertical flange form volumes serve as a conduit by which concrete poured therein will fill and flood-out the footing form volume. This is a difference that makes a difference. The Desjoyaux reference is not concerned with providing a load bearing wall that needs a footing but rather a swimming pool wall. The Desjoyaux reference does not contemplate providing a footing to spread the vertical load of the precast wall on the supporting soil beneath. The Desjoyaux reference lacks a footing form as intended by the present invention. The language of Claim 1 now clearly makes this distinction.

All the other claims as pending are dependent from Claim 1. Apart from the added distinctive features that such claims introduce, they are equally distinguishable from and patentable notwithstanding Desjoyaux by reason of such dependency on Claim 1. Nevertheless, certain of the dependent claims have been characterized by the examiner in a manner which the applicant considers to be inappropriate. Those further claims will now be addressed specifically.

Claims 3 - 7

The examiner has suggested that the reinforcing "A" shown as being present in the precast wall of Figures 6 and 7 of Desjoyaux meets the requirements of these claims, observing that the reinforcing "A" of Desjoyaux does extend into the pool-side "footing" extension at the base of the Desjoyaux wall. In reply, the applicant submits that the "A" components are part of pre-cast wall portion. Claims 3 - 7 all relate to coupling means extending into the empty space provided by flange, footing and trough volumes of the applicant's invention. These limitations are not met and are not present in Desjoyaux. The reinforcements in Desjoyaux are embedded in precast concrete.

Claims 8 - 11

The examiner has said that these claims would be allowable if rewritten to include Claim 1. The applicant submits that Claim 1 can be independently retained as being allowable. Nevertheless, the examiner's approval of these Claims 8 - 11 is appreciated.

Claim 12

The examiner has cited House as a basis for ruling that Claim 12 is obvious. But House lacks as required by Claim 12:

"the outer edge of at least one of said half-flange forms having at least portions of its surface extending to overlap and permit coupling to an adjacent half flange form when two of said wall panels with half flange forms are abutted together."

All of the panel ends in House are abutting. There is no suggestion in House of providing any form of overlap. Accordingly, there is no basis for rejecting this claim on grounds of obviousness.

Claim 13

The examiner cites columns 3 and 4 of Desjoyaux as anticipating the features of Claim 13. With respect, the applicant submits that there is no depiction or suggestion in Desjoyaux of the feature of flange and footing forms which, as stipulated in Claim 13, are made of:

"sheet material which is fastened by embedment to the panel wall portion of edges of the sheet material which edges are interrupted from alignment in a straight line so as to reduce the tendency for cracks to proliferate in the wall portion."

The sheet metal edges of the present invention are embedded in the wall panel. The edges are interrupted so as to resist the rapid formation of crack lines. Desjoyaux does not teach such a structure.

Claim 14

This claim has been amended as follows:

14. (Currently amended) A wall panel as in claim ~~[[1]]~~ 2 comprising a beam support post form fitted to said wall portion, said beam support post form being notched at its upper end, below the trough form mounted along the top end of the wall panel, to receive the end of a beam, and providing an upwardly extending open volume adjacent said wall panel for receiving binder material.

This amendment is consistent with Figure 15 of the present application and distinguishes over

Desjoyaux which lacks any suggestion of such a feature.

Claim 15 - 16

The examiner rejected Claim 15 as being anticipated by Desjoyaux suggesting that Desjoyaux meets the stipulation of providing:

"...a series of continuous, interconnected footing volumes extending between consecutive footing forms of each panel whereby the footing forms can be filled with a continuous volume of binder material that serves as the footing for the wall."

With respect, Desjoyaux does not show such interconnections between adjacent wall panels and is not capable of providing a "continuous volume of binder material" in a footing form for a wall composed of multiple panels. There is no footing form in Desjoyaux. Much less is there any suggestion of interconnected footing forms in Desjoyaux. The examiner cites Figure 6 of Desjoyaux showing footing forms, but as referenced earlier in this response, this figure depicts a precast wall with a precast base extension and does not depict a form for providing a continuous, inter-panel footing. Further there is no suggestion in Desjoyaux of creating a wall with interconnected footings.

The examiner rejected Claim 16 as being obvious. Claim 16 is dependent from Claim 15. Claim 16 is also nourished for patentability by its dependency on Claim 1.

Claim 17

This claim was rejected as being obvious based on House and Desjoyaux combined. It is not seen how either of these two references either described or suggests the presence of:

"a corner piece having vertical faces shaped to abut the vertical side edges of adjacent wall panels of said respective wall sections, said adjacent wall panels having vertical half-forms mounted along said abutting vertical side edges and further comprising a joiner piece for joining said respective half-forms and protruding coupling means pre-cast into the inner surface of the corner piece to become embedded in the concrete grout to be placed adjacent thereto and provide anchoring for the corner piece."

This claim addresses an additional component to a wall system for joining wall panels at their vertical edges. This component has an elaborate configuration which interacts synergistically with the vertical edges of the preformed wall panels of the invention. There is nothing in the cited references to suggest a component with such characteristics. There is therefore no basis for effecting an obviousness rejection.

Claims 18 and 19

Regarding the assertion that there is lack of support for Claims 18 and 19, Figures 12 and 13 show the plate that fits underneath the post of Figure 12 quite clearly. This plate is described in the disclosure (starting at line 3, page 20 of the PCT application as published) as follows:

“An alternate treatment for an outside, vertical corner can be based on provision of a pre-cast corner piece 38 as shown in Figure 11. This corner piece 38 is shaped to receive the abutting vertical edges 26 of adjacent wall panels 1. Sheet metal positioning plates 39, Figure 12, with a horizontal surface 40 defined and bounded by upwardly bent flanges 41 may be positioned beneath and on top of the corner piece. The flanges extend to and embrace the immediately adjacent walls 1 of the abutting panels. With these positioning plates 39 installed, the corner piece 38 is held precisely in the correct position with respect to the adjacent wall panels 1.

The bold text provides a simple explanation that supports the language of Claims 18 and 19.

Perhaps the examiner was not able to appreciate that the upwardly bent flanges 41 are able to embrace the bottom edges of the immediately adjacent walls of the abutting panels because she did not perceive the footing form volume defined by the footing form as an empty space at the time of assembly of the preformed wall panels. The footing form volume is an empty space when the wall panels are erected. There is therefore nothing to block the engagement of the bottom edge of the wall panel by such flanges.

It is trusted that with this explanation the examiner will now appreciate that there is no lack of enablement in support of Claims 18 and 19. It is requested that this objection to the application be withdrawn.

Claim 20

The examiner cites Figure 3 of House as indicating that a multitiered wall structure is contemplated by House. This is, in fact, shown in Figure 9 of House. However, the structure of House does not incorporate footing forms as stipulated by Claim 1 upon which Claims 15 and 20 depend.

Nevertheless, out of an abundance of caution, Claim 20 has been amended to incorporate the limitations of Claim 2 stipulating for the presence of the upper trough form, and further stipulating that the footing form of the second tier of wall panels overlies the trough form of the first tier of wall panels. With this amendment, it certainly cannot be said that Claim 20 is either anticipated or obvious in view of the prior art.

Amendments to the Disclosure

The applicant has presented amendments to the disclosure to ensure that the disclosure conforms with the language of the claims. No new matter has been added.

Conclusion

The examiner's time spent in the telephone interview is appreciated, as well as the effort that the examiner has spent in analyzing the cited references. It is believed that the responses of the applicant have demonstrated that the applicant has a meritorious invention and that the claims as now presented are patentable and distinguishable over the prior art. Reconsideration and a favorable ruling permitting this application to advance to Allowance are accordingly requested.

Respectfully submitted,

ARNE B. WALLIN

Per: /David J. French/

David J. French
Reg. No. 31229

Miltons LLP
225 Metcalfe Street, Suite 700
Ottawa, Canada K1P 5W6
Tel: direct 1-613-232-8389
Tel: 1-613-567-6824 x232 x253
Fax: 1-613-567-4689